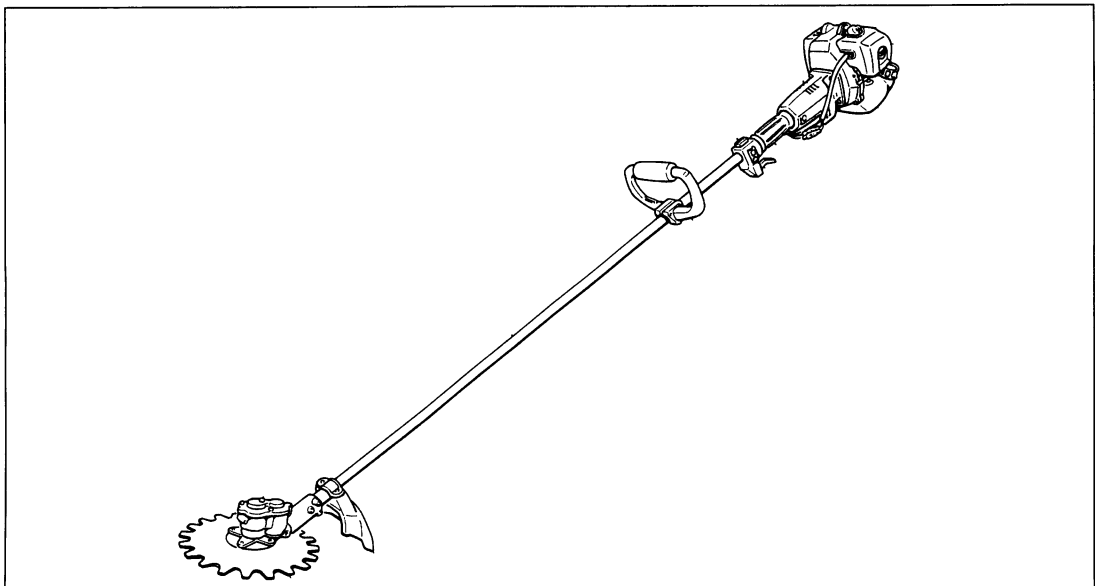




OWNER / OPERATOR MANUAL

RECIPROCATOR

SGC2300DL



WARNING



The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

IMPORTANT:

Before operating your RedMax product, read this manual carefully and completely.

Thank you for choosing RedMax reciprocator.
This manual will provide you with full understanding of the necessary instructions for assembly, operation and maintenance of the equipment.
Please read it carefully before starting operation.
For continued safe and reliable operation, use ONLY original RedMax parts and accessories, Adhere to all notes and warnings.

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FOR SAFE OPERATION

KNOW YOUR UNIT

1. Read this Owner's Manual carefully until you completely understand and can follow all safety rules, precautions, and operating instructions before operating the unit.
2. Restrict your unit to users who understand and follow all safety rules, precautions, and operating instructions found in this manual. Children should not be allowed to operate this unit.

PLAN AHEAD

1. Dress in a long-sleeved shirt and long pants. Wear protective gloves and shoes. Eye and ear protection should be worn at all times. Do not wear loose clothing, jewelry, short pants or sandals. Do not go barefoot.
2. Guard against hazardous situations at all times. Warn adults to keep pets and children away from the work area. Establish a safe method for gaining your attention during operation. Be careful if you are approached.
3. Do not operate the unit when you are tired, ill or upset; or if you are under the influence of alcohol, drugs, or medication.
4. Inspect the work site before each use. Remove all debris and objects that could be thrown, become entangled in the cutting head, or cause damage during operation.

HANDLE FUEL WITH CAUTION

1. Eliminate all sources of sparks or flame (including smoking, open flames, or work that could cause sparks) in the area where fuel is mixed, poured, or stored.
2. Mix, pour, and store fuel in an approved, marked container and in a well ventilated area.
3. Be sure to stop the engine before refueling the unit.
4. Do not smoke while handling fuel or while operating the unit.
5. Wipe up all spills before starting the engine. Move at least 10 feet (3 meters) away from fuel and refueling site before starting the engine.

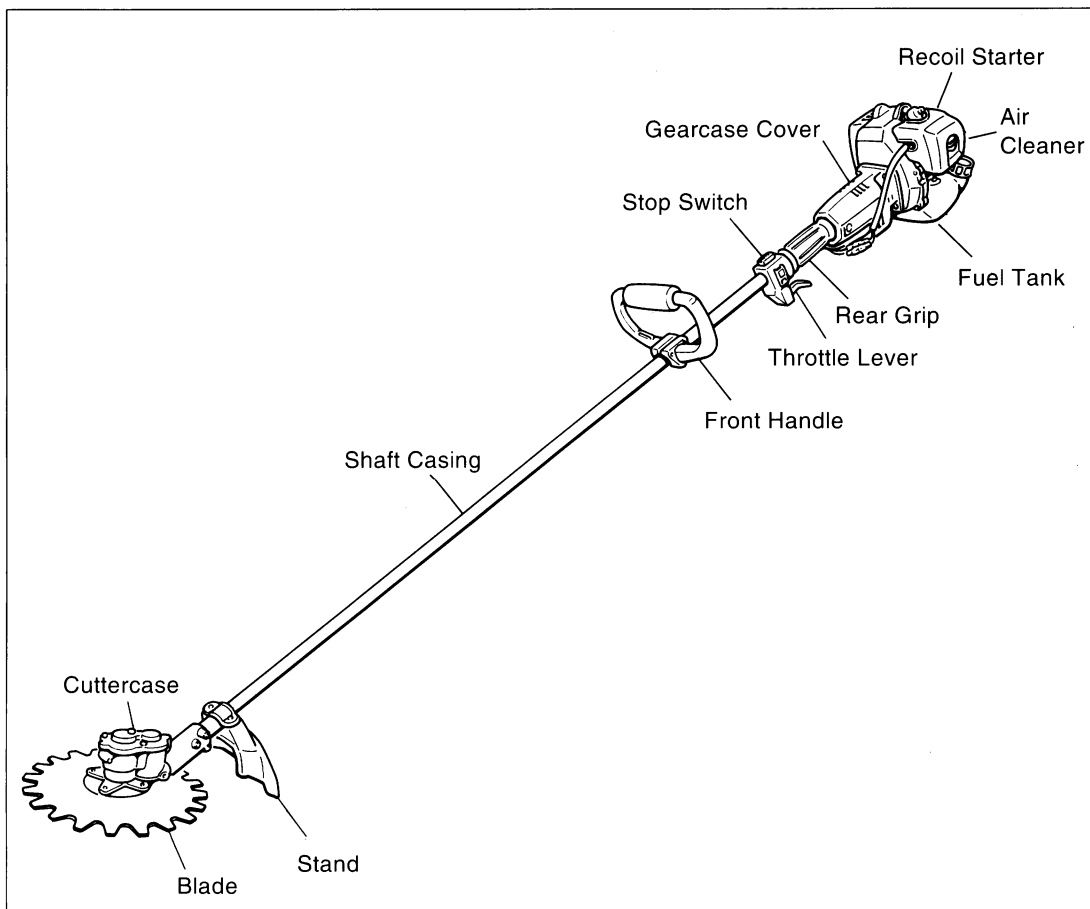
OPERATE YOUR UNIT SAFELY

1. Inspect the entire unit before each use for worn, loose, or damaged parts. Do not use until the unit is in proper working order.
2. Keep the handles free of oil and fuel.
3. Never start or run the engine inside a closed room or building. Exhaust fumes contain dangerous carbon monoxide.
4. Keep the engine idle speed adjusted properly so that the cutting head comes to a complete stop when trigger is released.
5. Be sure to stop the engine before refueling, inspecting or leaving the unit unattended.
6. Always use both hands to hold the unit.
7. Do not use any accessory or attachment other than those bearing the RedMax mark and recommended for the unit.

MAINTAIN YOUR UNIT PROPERLY

1. Disconnect the spark plug before performing all maintenance except for carburetor adjustment.
2. Use only recommended, genuine replacement parts to avoid creating hazard and/or voiding your warranty.
3. Wear protective gloves when handling or performing maintenance on metal blades.
4. When transporting or storing the unit, drain fuel from the fuel tank.
5. Do not store the unit or fuel in a closed area where fuel vapors can reach an open flame from hot water heaters, furnaces, and so on.
6. Store the unit in a dry area out of the reach of children.
7. All engine service, other than those explained in this manual, should be performed by competent service personnel. Improper service to the muffler and flywheel could cause serious accidents.

PARTS LOCATION & SPECIFICATION



SPECIFICATIONS

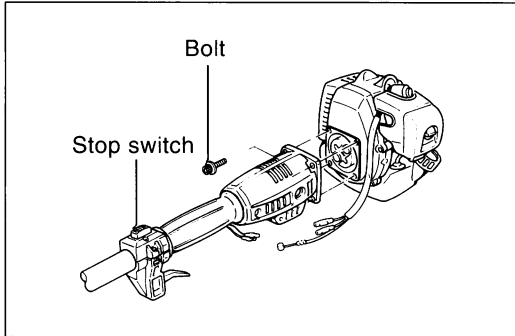
Model Name:	SGC2300DL	
Overall Dimensions (L × W × H):	74.4 × 9.1 × 8.7	in.
Dry Weight:	14.0	lbs.
Transmission:	Automatic centrifugal clutch, gear reduction and crank mechanism	
Reduction Ratio:	7.87	
Number of cutters per blade:	20	
Engine Type:	2-stroke air-cooled gasoline engine	
Displacement:	22.5 (1.37)	cc (cu. in.)
Max. Output:	0.9 at 7,000 rpm	HP
Max. Torque:	8.95 at 5,500 rpm	in-lbs
Fuel:	Mixture (Gasoline 32: 2-cycle oil 1)	
Fuel Tank Capacity:	1.07	pints
Carburetor:	Diaphragm type, Rotary valve	
Ignition System:	Transistor controlled flywheel magneto	
Spark Plug:	Champion RCJ-6Y	
Starting:	Recoil starter	
Stopping:	Primary circuit short-circuiting	
Standard Accessory:	Service tool kit	
Optional Accessory:	Shoulder strap	

(*Specifications are subject to change without notice.)

SET UP

A. Engine

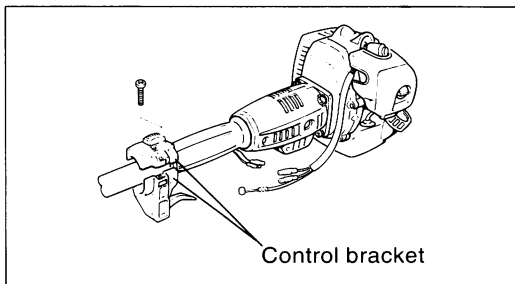
1. Install the engine to the driveshaft so that the cylinder head and the stop switch may come on the same side.
2. Using attached four bolts, secure the connection firmly with equal force (Torque: 25 in-lbs)



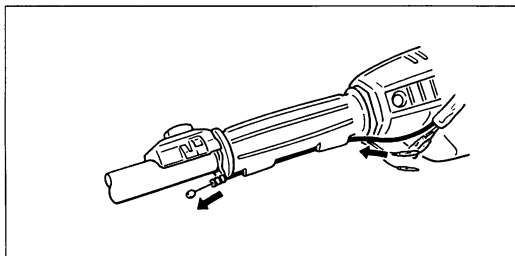
Never use any screws other than those specified by the manufacturer, or the engine can get loose, resulting in a hazardous event.

B. Throttle Control

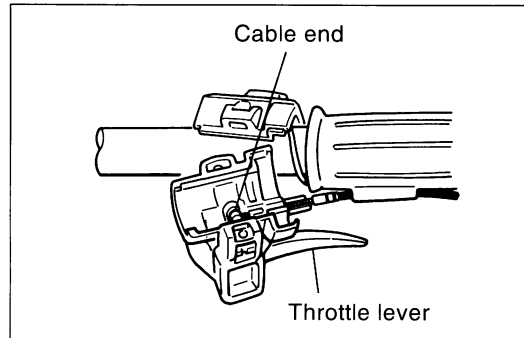
1. Loosen two screws and remove the control bracket from the shaft casing.



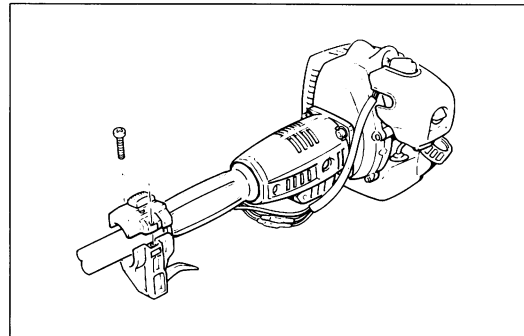
2. Pass the throttle cable through the holes on the bottom of the rear grip.



3. Hook the cable end into the hole of the throttle lever.



4. Install the control bracket to the shaft casing.
5. Connect the switch wires (Black → Black/Red → Red).

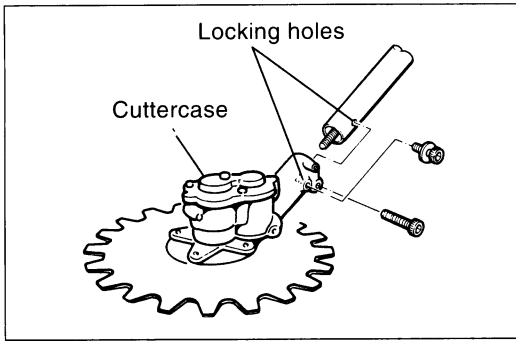


C. Blade Cuttercase



The blade has very sharp edges. Be sure to use protective gloves whenever handling it.

1. Remove the fastening screw (long) and the lock screw (short) from the cuttercase.
2. While aligning the locking holes (cuttercase hole, spacer hole, and shaft casing hole) install the cuttercase assembly to the shaft casing. If it will not bottom, twist the case slightly back and forth.
3. Align the locking holes and make sure that the locking screw (short) is fastened to the bottom by hand, then secure it with wrench.



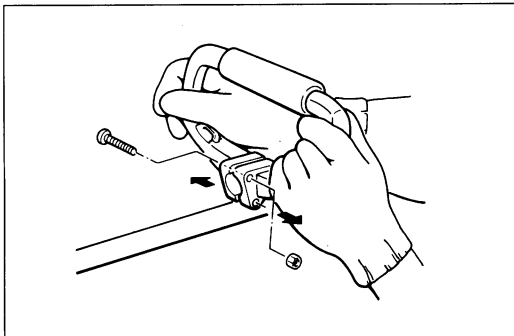
Note:
If the locking screw is tightened up with the holes out of alignment, the cuttercase may be damaged.

4. Fasten the cuttercase fastening screw (long).

D. Front Handle

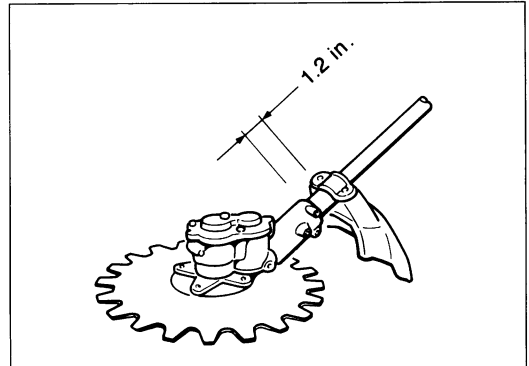
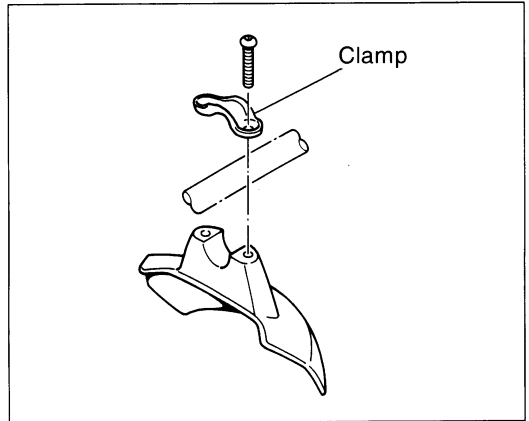
Extend the handle gap and fit it over the shaft casing.

Adjust the position and fasten with three screws and nuts provided with the products.



E. Stand

Install the stand onto the shaft casing approx. 1.2 inches away from the cuttercase. Fasten the clamp uniformly.



FUEL

The RedMax engines are lubricated by oil specially formulated for air-cooled 2-cycle gasoline engine use. When RedMax oil is not available, use an anti-oxidant added quality oil expressly labeled for air-cooled 2-cycle engine use.

RECOMMENDED MIXING RATIO GASOLINE 32 : OIL 1

Exhaust emission are controlled by the fundamental engine parameters and components (eq., carburation, ignition timing and port timing) without addition of any major hardware or the introduction of an inert material during combustion.

These engines are certified to operate on unleaded gasoline.

WARNING!!!

The fuel is highly flammable. Do not smoke or bring any flame or sparks near fuel.

■ HOW TO MIX FUEL

1. Measure out the quantities of gasoline and oil to be mixed.
2. Put some of the gasoline into a clean, approved fuel container.
3. Pour in all of the oil and agitate well.
4. Pour in the rest of gasoline and agitate again for at least one minute.
5. Put a clear indication on the outside of the container to avoid mixing up with gasoline or other containers.

■ FUELING UNIT

1. Untwist and remove the fuel cap. Rest the cap on a dustless place.
2. Put fuel into the fuel tank to 80% of the full capacity.
3. Fasten the fuel cap securely and wipe up any fuel spillage around the unit.

CAUTION;

1. Select bare ground for fueling.
2. Move at least 10 feet (3 meters) away from the fueling point before starting the engine.
3. Stop the engine before refueling the unit.

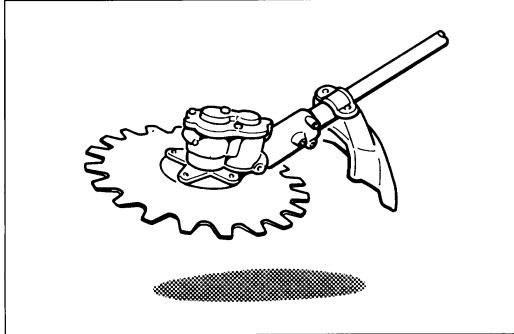
FOR YOUR ENGINE LIFE, AVOID;

1. **FUEL WITH NO OIL(RAW GASOLINE)** – It will cause severe damage to the engine inner parts very quickly.
2. **GASOHOL** – It can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
3. **OIL FOR 4-CYCLE ENGINE USE or WATER COOLED 2-CYCLE ENGINE USE** – It can cause spark plug fouling, exhaust port blocking, or piston ring sticking.

OPERATION

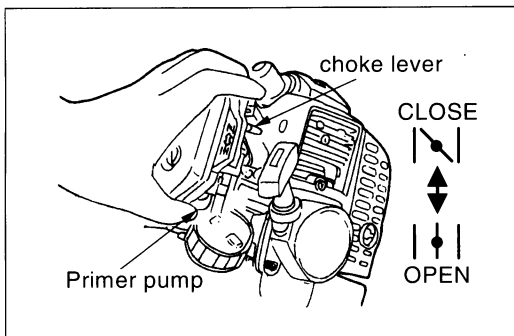
A. Starting Engine

1. Place the machine on a flat, firm surface. Keep the cutting head clear of everything around it.

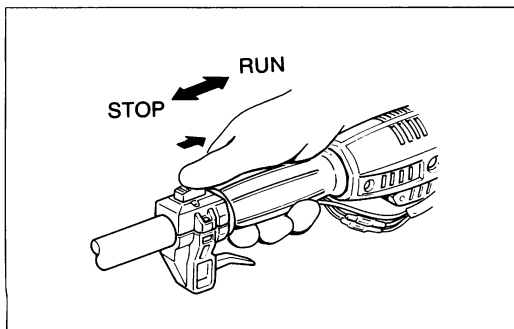


Take care that the cutting head will start rotating upon starting the engine.

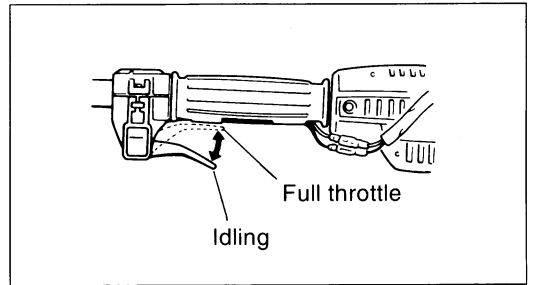
2. Push primer pump several times until overflow fuel flows out in the clear tube.



3. Move choke lever to the closed position.
4. Shift the stop switch backward (to the engine side).



5. While holding the throttle lever at the half open position, pull starter knob.



Note:

Avoid pulling rope to its full length or returning rope by releasing the knob quickly.

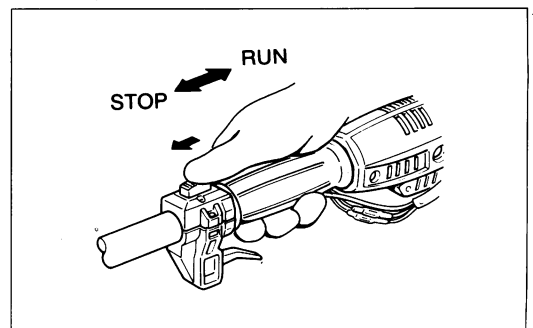
6. When engine has started, move choke lever gradually to the open position.
7. Allow your engine to warm up for a couple of minutes before starting operation.

Note:

- When re-starting engine immediately after stopping it, keep choke lever at the open position.
- If engine fails to start even after several attempts, the engine may have been flooded with fuel. Open choke and pull rope several times.

B. Stopping engine

1. Release throttle lever and allow the engine to idle a couple of minutes.
2. Slide the stop switch forward (to the cutter side).



Note:

Except in an emergency, do not stop engine running at high speed. This can shorten the engine life.

USE

This machine does cutting not by a rotary cutter like conventional trimmers but by a pair of special blades, each upper blade and lower blade oscillate opposite direction alternately within a limited angle at a speed of approximately 1/30 of conventional trimmers.

This unique mechanism brings you many benefits like the following:

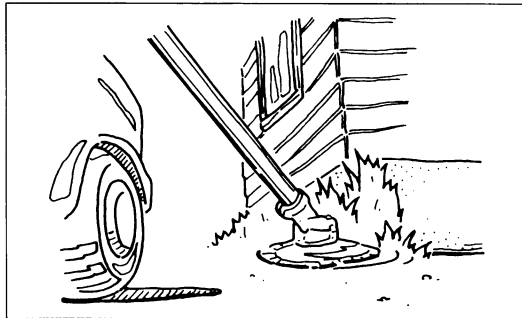
1. Since the blade does not cause grass chips and pebbles to be thrown around, you may use less care about your clothing or surroundings.
2. Should the blade hit a rigid object like stones, trees or steel poles during operation, it does not produce a bounce motion that can cause loss of machine control.
3. Since the blade does not cause cut grass to wrap around the neck, you need not to stop operation to remove such wrappers.

What's more, since the whole circle of the blade is available for cutting, you can move the cutting head in all directions and cut grass growing on such place difficult-to-get with conventional trimmer.

You can even trim the waterside without splashing water.

Recommended applications:

Parking area



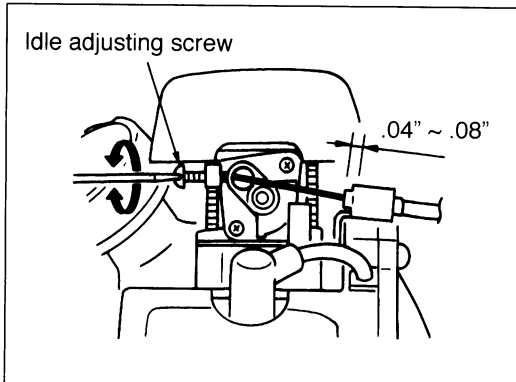
C. Adjustment

1. Adjusting Throttle Cable Play

Check the cable play and, if necessary, adjust between .04" and .08" by bending throttle wire receiver of the bracket with a nipper.

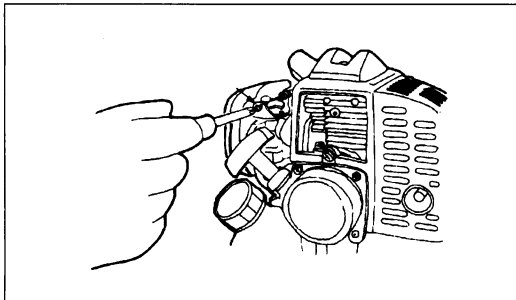
2. Adjusting Idling Speed

The idling speed is adjusted by turning idle adjusting screw on carburetor. When idling speed is so low as engine stops occasionally, turn the screw clockwise. When idling speed is so high as cutting blades keep moving, turn the screw counterclockwise.

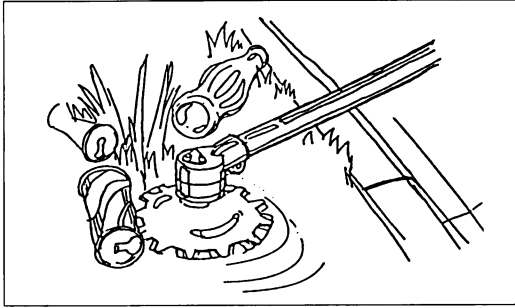


Note:

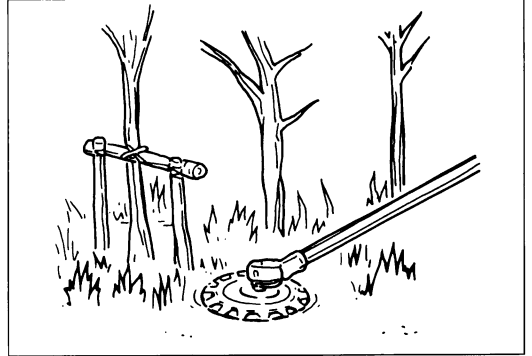
When adjusting idling speed, be sure the engine has warmed up.



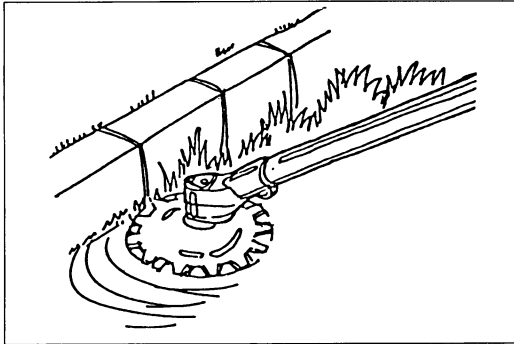
Road side



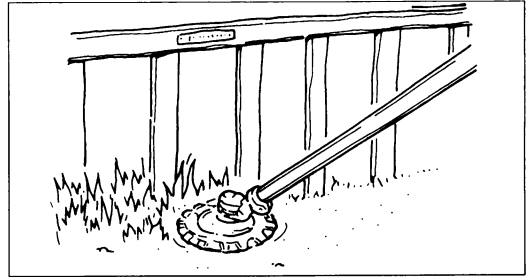
Among trees



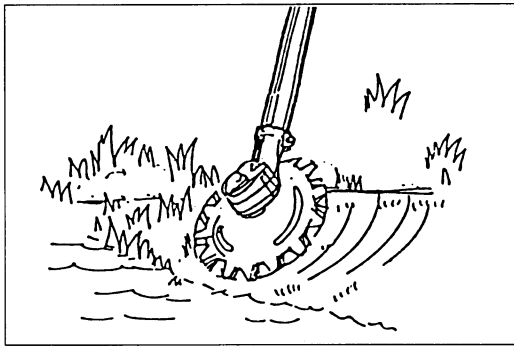
Road edge



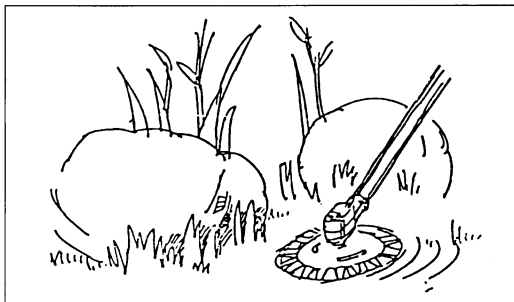
Near fences



Water side



Around stones



How to use

WARNING!!!

1. Always wear eye protection such as safety goggles. Never lean over the rotating cutting head. Rocks or other debris could be thrown into eyes and face and cause serious personal injury.
 2. Keep the debris guard attached in place at all times when the unit is operated.
- Adjust the front handle to the most comfortable position.
 - Start the engine and pull the throttle lever gradually. The blades will start moving as the engine speed goes up.
 - To stop the blade motion, simply release the throttle lever. The clutch will disengage and the blades stop moving while the engine keeps idling.
 - Move the cutting head as sliding its bottom on the ground. This will help you do the job with less effort.

Note:

- Avoid running the engine at full throttle with no load. Continuous no load full throttle operation can cause damage to the engine and driveshaft.
- Operation at too slow engine speed can cause abnormal vibration of the machine, resulting in short life of driveshaft and clutch parts. If you felt such vibration, use a higher speed range.
- Though the blades are made of harder steel compared to conventional metal blades, continuous cutting in soil will accelerate wear.

MAINTENANCE



Before cleaning, inspecting or repairing your unit, make sure that engine has stopped and is cool.

A. After every use

- Remove all dust, dirt and grass from the entire unit.
- Check complete unit for loose or missing fasteners or parts. Correct if found.
- Check engine for any fuel leaks.

B. Blade Maintenance

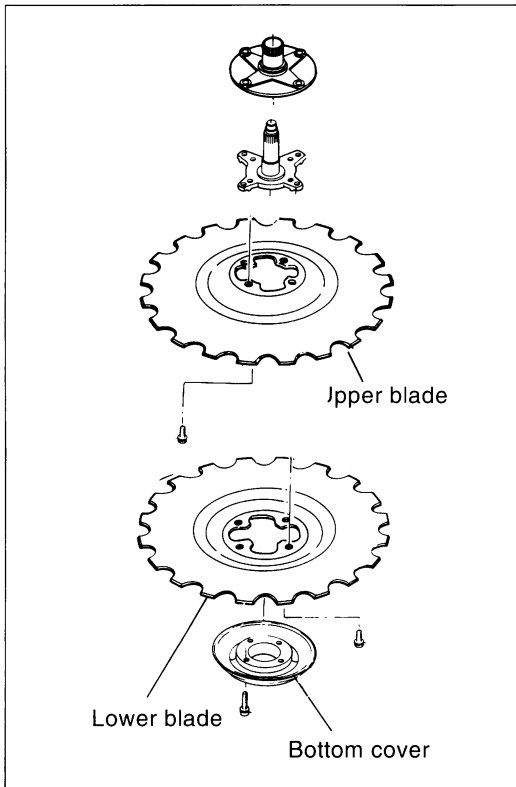


Use protective gloves whenever inspecting, removing, sharpening, and installing the blade.

- Wipe off dust and dirt attached to the blade, and oil it after every use.
- As the extent of wear differs by each cutter depending on use conditions, rotate the blade position at intervals.

To Remove Blades:

1. Turn over the machine and remove the bottom cover by removing the four cross-slotted screws.
2. Loosen the four socket screws and remove the lower blade.
3. Loosen the four socket screws and remove the upper blade.

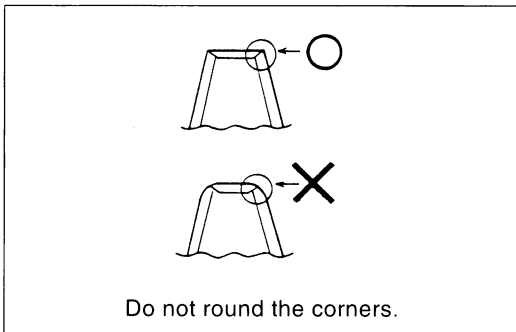


To Install Blades:

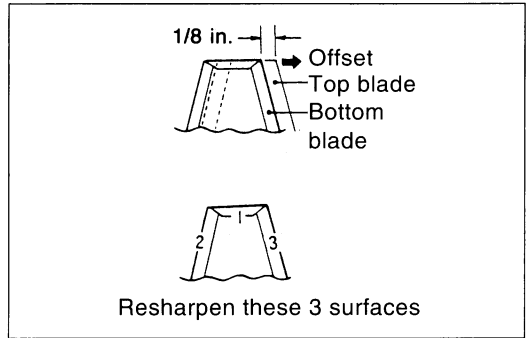
The upper and lower blades are interchangeable. When fastening the blade mounting screws, torque them uniformly (Torque: 100 to 130 in-lbs)

To Sharpen Blade:

1. When the corners of cutter become rounded and the cutting edges become dull, resharpen using a small disk grinder, etc.

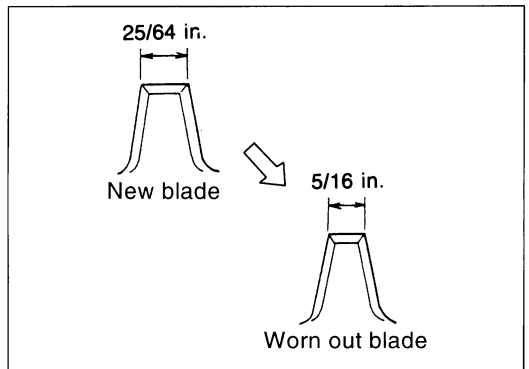


2. When sharpening, offset the top and bottom blade teeth by 1/8 inches, as shown in the illustration.



Note:
Apply the grinder lightly and quickly. Pressing too strongly or grinding for too long will generate heat which can soften the temper of the blade and accelerate wear.

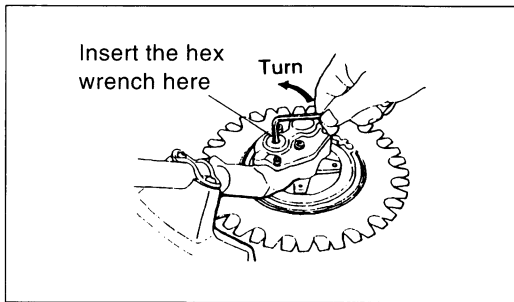
3. The width of cutter decreases with repeated use and resharpening. Replace with a new blade when the width at the end becomes less than 5/16 in.



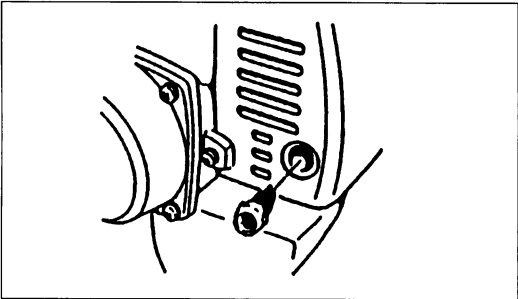
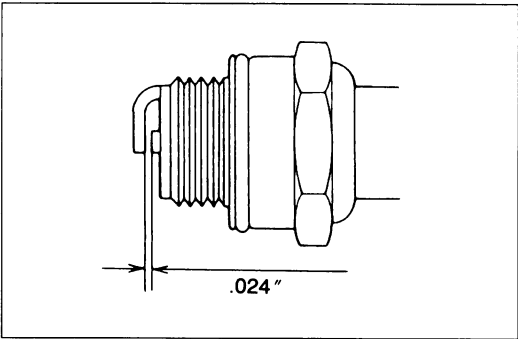
Note:
Using a worn blade can cause chipping of cutters, resulting in a loss of operation time and shorter service life of the machine.

To Rotate Blade By Hand:

When resharpening an old blade or replacing with a new blade, insert the accessory hex wrench into the hex hole in the top of the crankcase and turn strongly 2~3 times. This removes burrs and uneven painting from the blade and makes starting easier.



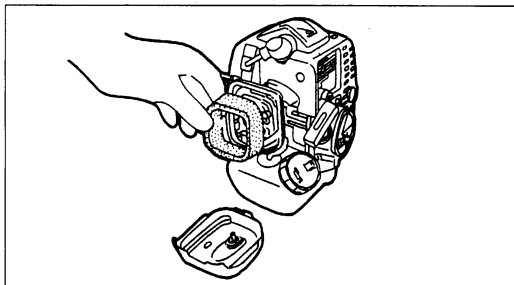
! Never perform this operation while the engine is running because this is extremely dangerous. Always stop the engine before inspecting the blade for any reason.



C. Air Filter

A dirty air filter makes starting difficult and lowers the output. Inspect the filter periodically and, when dirty, clean the element by washing in gasoline.

Dry the filter element completely before installing it in place.



D. Spark Plug

Inspect the spark plug frequently especially if difficult starting or miss-firing is experienced.

Pull the spark plug cap out and remove the plug using the socket wrench attached to the unit. Clean the electrodes and reset spark gap to .24 " . For replacement plug, use a Champion RCJ8 or NGK BMR6A.

E. Spark Arrester

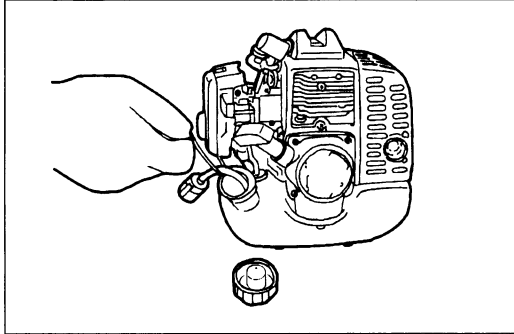
Lack of power and Starting failure can be caused by carbon deposits in the exhaust passage. Clean or replace the spark arrester as necessary.

1. Remove the two screws securing the cylinder/muffler shield (red).
2. While spreading out the bottom end of the muffler shield, disassemble the heat insulation plate (black). Now the shield can be removed by hand.
3. Loosen four screws with the socket screw wrench supplied with the machine, and separate the muffler halves. Use care not to make sealing gasket damaged. A damaged gasket must be replaced with new one.
4. When assembling the muffler halves, tighten the screws equally and securely.

F. Fuel Filter

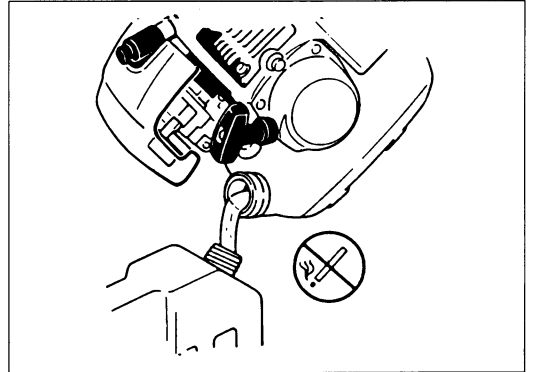
A clogged fuel filter can cause poor acceleration and RPM fluctuation. Inspect the fuel pick-up every 25 hours of use and clean or replace as necessary.

Take the fuel pick-up out of the tank by using a small wire hook. Remove the filter from fuel hose and carefully disassemble it by removing the retainer. Wash the components in clean gasoline. Reassemble the components and connect fuel hose to the assembly.



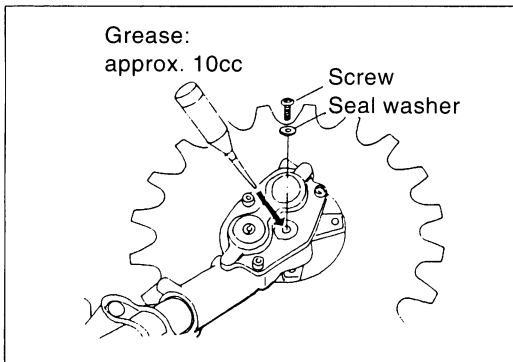
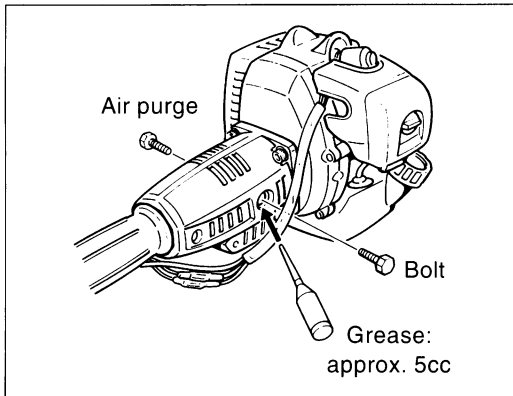
H. Storage

- Oil the blades.
- Drain fuel tank and run engine out until all fuel in carburetor is used up.



G. Gearcase and Cuttercase

- Periodically refill the case with grease (every 50 hours).
- Use only lithium based greases.



- Remove spark plug and drop a spoonful of oil into the cylinder. Crank engine several times and replace spark plug. Pull starter until compression is felt.
- Store unit in a dry, dust-free place.

! Do not use any accessory or attachment other than those specifically designed for use with this unit. Serious personal injury to the user or damage to the engine could result.

PRTS LIST

Fig.1 DRIVE UNIT & ACCESSORIES-SGC2300DL

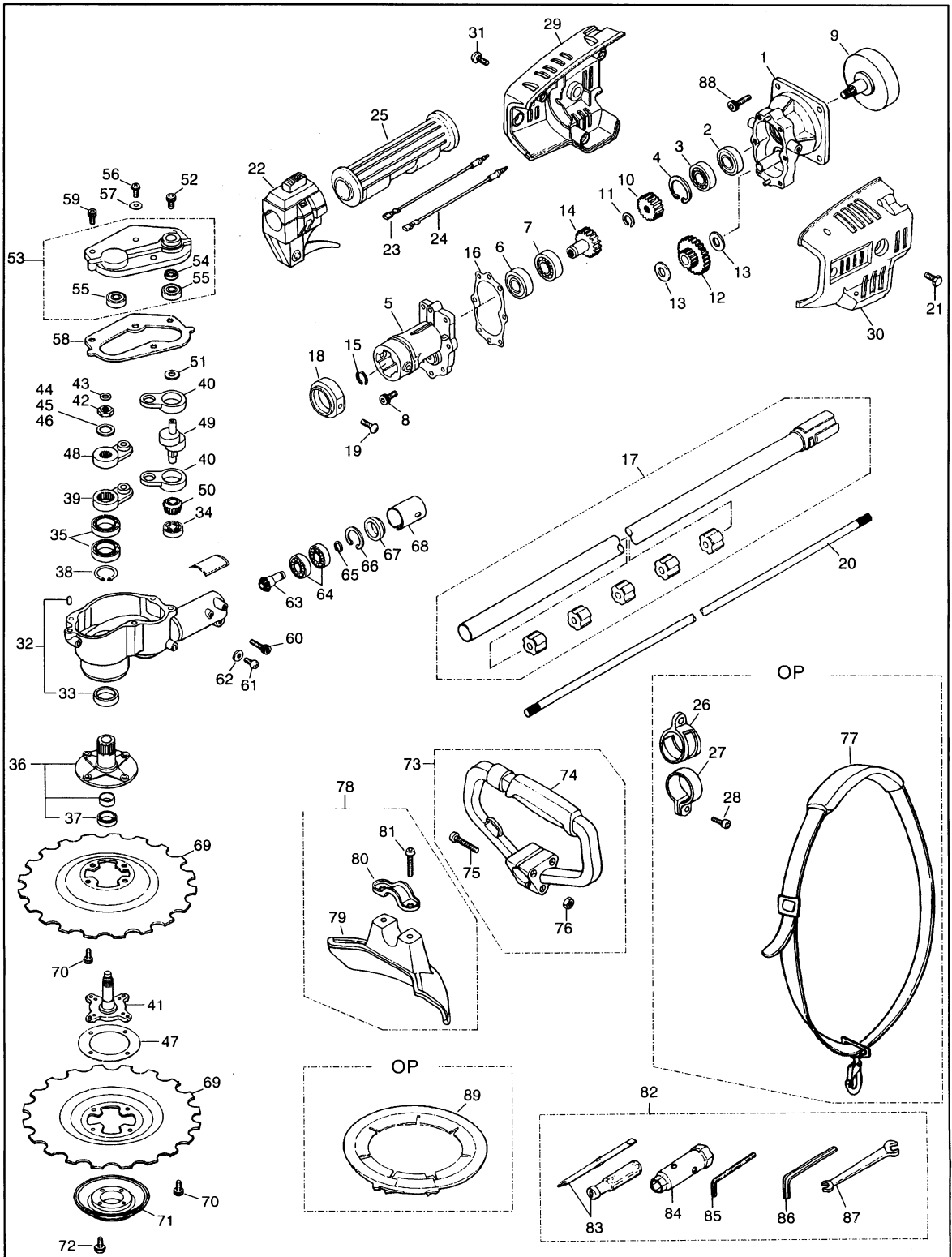


Fig.1 DRIVE UNIT & ACCESSORIES-SGC2300DL

Key#	Part Number	Description	Q'ty /UNIT	NOTE	Key#	Part Number	Description	Q'ty /UNIT	NOTE
1	3805-11101	CASE COMP, rear	1		61	0263-60514	SCREW	1	
2	06004-06001	BEARING	1		62	3805-13920	GASKET	1	
3	06000-06001	BEARING	1		63	3805-13930	PINION	1	
4	04065-02812	RING	1		64	06000-06000	BEARING	2	
5	3805-11211	CASE, front	1		65	3180-13330	RING	1	
6	06004-06001	BEARING	1		66	04065-02612	RING	1	
7	06000-06001	BEARING	1		67	3805-13940	PACKING	1	
8	01252-30520	BOLT	6		68	3805-13951	SPACER	1	
9	3805-11310	DRUM	1		69	3805-15111	BLADE	2	
10	3805-11320	GEAR, pinion	1		70	01252-40608	BOLT	8	
11	3180-13330	RING	1		71	3805-15140	STABILIZER	1	
12	3805-11331	GEAR	1		72	0263-30508	SCREW	4	
13	3805-11370	WASHER	2		73	3974-14300	HANDLE ASSY	1	
14	3805-11360	GEAR, wheel	1		74	3805-14311	HANDLE	1	
15	3130-13270	RING	1		75	0260-00530	SCREW	3	
16	3805-11411	GASKET	1		76	0280-10504	NUT	3	
17	3805-12100	PIPE COMP	1		77	6112-17201	STRAP ASSY	1	OP
18	3565-11341	CAP	1		78	3565-24001	GUARD ASSY	1	
19	0263-90510	SCREW	2		79	3565-24111	GUARD	1	
20	3805-12210	SHAFT	1		80	3520-24120	CLAMP	1	
21	0225-00608	BOLT	2		81	3540-24130	BOLT	2	
22	6041-12400	LEVER ASSY	1		82	3805-91000	TOOL SET	1	
23	6116-14420	CORD(A), black	1		83	1030-91340	SCREWDRIVER	1	
24	6116-14430	CORD(B), red	1		84	3144-91160	SOKET	1	
25	3577-32140	GRIP	1		85	09007-00425	WRENCH	1	
26	6130-18101	HANGER	1	OP	86	09007-00528	WRENCH	1	
27	6130-18200	CLAMP	1	OP	87	3540-91120	SPANNER	1	
28	0263-90520	SCREW	1	OP	88	0225-50616	BOLT	4	
29	3805-11511	COVER, right	1		89	6251-15910	COVER	1	OP
30	3805-11521	COVER, left	1						
31	2200-76210	SCREW	3						
32	3974-13102	CASE COMP	1						
33	3805-13130	SEAL	1						
34	06000-00608	BEARING	1						
35	06000-06804	BEARING	2						
36	3805-13200	SHAFT COMP	1						
37	3805-13230	SEAL	1						
38	04064-02012	RING	1						
39	3805-13412	ARM, lower	1						
40	3805-13432	CONROD	2						
41	3805-13510	SHAFT	1						
42	3805-13520	NUT	1						
43	3805-13560	SHIM	1						
44	3805-13550	SHIM, 0.3t	0/1						
45	3805-13570	SHIM, 0.2t	0/1						
46	3805-13580	SHIM, 0.1t	0/1						
47	3805-13590	SHIM	1						
48	3805-13612	ARM, upper	1						
49	3805-13711	CRANKSHAFT	1						
50	3805-13720	GEAR	1						
51	01641-20812	WASHER	1						
52	3805-13750	BOLT	1						
53	3974-13800	COVER COMP	1						
54	3805-13840	SEAL	1						
55	06002-00608	BEARING	2						
56	0263-00610	SCREW	1						
57	07005-00612	GASKET	1						
58	3805-13910	GASKET	1						
59	01252-40520	BOLT	3						
60	3805-13970	BOLT	1						

PRTS LIST

Fig.2 ENGINE UNIT – SGC2300DL

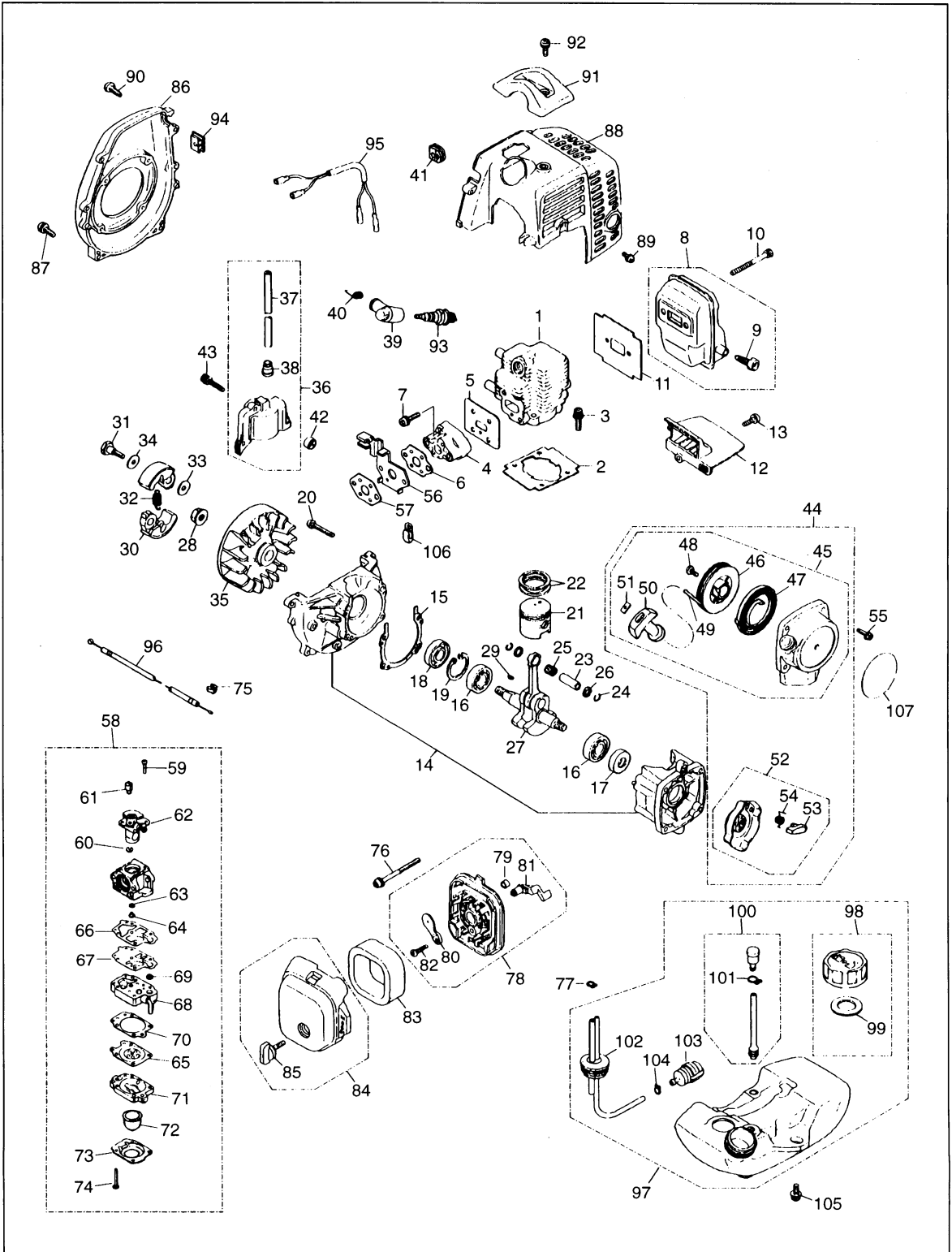


Fig.2 ENGINE UNIT – SGC2300DL

Key#	Part Number	Description	Q'ty /UNIT	NOTE	Key#	Part Number	Description	Q'ty /UNIT	NOTE
1	5580-12110	CYLINDER	1		61	1881-81140	SWIVEL	1	
2	5500-12210	GASKET	1		62	—————	VALVE ASSY	1	
3	1850-12130	BOLT	2		63	1751-81240	O-RING	1	
4	5500-13162	INSULATOR	1		64	5628-81250	JET	1	
5	5500-13120	GASKET	1		65	3310-81260	DIAPHRAGM	1	
6	5500-13130	GASKET	1		66	1065-81410	GASKET, pump	1	
7	0263-90520	SCREW	2		67	1065-81420	DIAPHRAGM ,pump	1	
8	5850-15100	MUFFLER ASSY	1		68	1850-81450	BODY, pump	1	
9	5850-15140	ARRESTER	1		69	3306-81380	SCREEN	1	
10	01252-30550	BOLT	2		70	1850-81470	GASKET, diaphragm	1	
11	5500-15210	GASKET	1		71	1850-81490	BODY, purge	1	
12	5500-15220	PLATE	1		72	1751-81510	PUMP, priming	1	
13	0263-90416	SCREW	1		73	1850-81520	COVER, pump	1	
14	5500-21100	CRANKCASE COMP	1		74	1850-81530	SCREW	4	
15	5500-21140	GASKET	1		75	1601-81810	CAP	1	
16	06030-06001	BEARING	2		76	0263-90560	SCREW	2	
17	2169-21210	SEAL	1		77	1950-86120	CLIP	1	
18	1850-21220	SEAL	1		78	5500-82102	BODY ASSY	1	
19	04065-02812	RING	1		79	1970-82190	SLEEVE	2	
20	01252-30530	BOLT	4		80	5500-82131	PLATE	1	
21	5600-41111	PISTON	1		81	5500-82140	LEVER	1	
22	1100-41210	RING	2		82	2630-33610	SCREW	1	
23	1101-41310	PIN	1		83	5500-82171	ELEMENT	1	
24	1260-41320	RING	2		84	5600-82201	COVER ASSY	1	
25	1140-41330	BEARING	1		85	5500-82221	KNOB	1	
26	1101-41340	WASHER	2		86	5501-31111	COVER	1	
27	5500-42001	CRANKSHAFT COMP	1		87	0263-90520	SCREW	4	
28	1650-43230	NUT	1		88	5580-32111	COVER	1	
29	1000-43240	KEY	1		89	1850-32160	SCREW	1	
30	1140-51111	SHOE	2		90	1900-31410	SCREW	2	
31	1140-51250	SCREW	2		91	5500-32210	GUARD	1	
32	1970-51221	SPRING	1		92	0263-90514	SCREW	1	
33	1140-51230	WASHER	2		93	5602-73110	SPRK PLUG	1	
34	1970-51241	WASHER	2		94	1852-72120	GROMMET	1	
35	5506-71110	ROTOR	1		95	5501-73201	CORD COMP	1	
36	5500-71200	COIL ASSY	1		96	1855-82100	CABLE COMP	1	
37	5500-71220	CORD	1		97	5500-85002	TANK ASSY	1	
38	2626-71320	CAP	1		98	5500-85201	CAP ASSY	1	
39	1900-72111	CAP	1		99	5500-85220	PACKING	1	
40	1900-72120	SPRING	1		100	5500-85601	BREATHER ASSY	1	
41	5500-72130	GROMMET	1		101	1950-86120	CLIP	1	
42	1260-71261	SPACER	2		102	5500-85300	PIPE COMP	1	
43	3310-72150	BOLT	2		103	3302-85400	FILTER ASSY	1	
44	5500-75000	STARTER ASSY	1		104	1260-85460	CLIP	1	
45	5500-75100	RECOIL ASSY	1		105	5500-85510	SCREW	3	
46	1850-75120	REEL	1		106	1140-72231	CLAMP	1	
47	1850-75130	SPRING	1		107	5517-91120	LABEL, recoil	1	
48	1850-75151	SCREW	1						
49	1850-75160	ROPE	1						
50	1140-75320	KNOB	1						
51	5500-75170	PLATE	1						
52	1850-75201	PULLEY ASSY	1						
53	1850-75221	RATCHET	1						
54	1850-75230	SPRING	1						
55	0263-90416	SCREW	4						
56	5628-83221	BRACKET	1						
57	5500-13130	GASKET, carburetor	1						
58	5602-81001	CARBURETOR ASSY	1						
59	5850-81110	SCREW	2						
60	1751-81130	RING	1						

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

THE CALIFORNIA AIR RESOURCES BOARD AND KOMATSU ZENOAH Co. ARE PLEASED TO EXPLAIN THE **EMISSION CONTROL SYSTEM WARRANTY** ON YOUR **1995 AND LATER** LAWN AND GARDEN EQUIPMENT ENGINE. IN CALIFORNIA, NEW UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES MUST BE DESIGNED, BUILT AND EQUIPPED TO MEET THE STATE'S STRINGENT ANTI-SMOG STANDARDS.

KOMATSU ZENOAH Co. MUST WARRANT THE EMISSION CONTROL SYSTEM ON YOUR LAWN AND GARDEN EQUIPMENT ENGINE FOR THE PERIODS OF TIME LISTED BELOW PROVIDED THERE HAS BEEN NO ABUSE, NEGLIGENCE OR IMPROPER MAINTENANCE OF YOUR LAWN AND GARDEN EQUIPMENT ENGINE.

YOUR EMISSION CONTROL SYSTEM. MAY INCLUDE PARTS SUCH AS THE CARBURETOR, THE IGNITION SYSTEM, AND CATALYTIC CONVERTER. ALSO INCLUDED MAY BE THE HOSES, BELTS, CONNECTORS AND OTHER EMISSION-RELATED ASSEMBLIES.

WHERE A WARRANTABLE CONDITION EXISTS, KOMATSU ZENOAH Co. WILL REPAIR YOUR LAWN AND GARDEN EQUIPMENT ENGINE AT NO COST TO YOU INCLUDING DIAGNOSIS, PARTS AND LABOR.

MANUFACTURER'S WARRANTY COVERAGE:

THE 1995 AND LATER UTILITY AND LAWN AND GARDEN EQUIPMENT ENGINES ARE WARRANTED FOR **TWO YEARS**. IF ANY EMISSION-RELATED PART ON YOUR ENGINE IS DEFECTIVE, THE PART WILL BE REPAIRED OR REPLACED BY KOMATSU ZENOAH Co.

OWNER'S WARRANTY RESPONSIBILITIES:

—AS THE LAWN AND GARDEN EQUIPMENT ENGINE OWNER, YOU ARE RESPONSIBLE FOR THE PERFORMANCE OF THE **REQUIRED MAINTENANCE LISTED IN YOUR OWNER'S MANUAL**. KOMATSU ZENOAH Co. RECOMMENDS THAT YOU RETAIN ALL RECEIPTS COVERING MAINTENANCE ON YOUR LAWN AND GARDEN ENGINE, BUT KOMATSU ZENOAH Co. CAN NOT DENY WARRANTY SOLELY FOR THE LACK OF RECEIPTS OR FOR YOUR FAILURE TO ENSURE THE PERFORMANCE OF ALL SCHEDULED MAINTENANCE.

—AS THE LAWN AND GARDEN EQUIPMENT ENGINE OWNER, YOU SHOULD BE AWARE, HOWEVER, THAT KOMATSU ZENOAH Co. MAY DENY YOU WARRANTY COVERAGE IF YOUR LAWN AND GARDEN EQUIPMENT ENGINE OR A PART HAS FAILED DUE TO ABUSE, NEGLIGENCE, IMPROPER MAINTENANCE OR UNAPPROVED MODIFICATION.

—YOU ARE RESPONSIBLE FOR PRESENTING YOUR LAWN AND GARDEN EQUIPMENT ENGINE TO A KOMATSU ZENOAH Co. DISTRIBUTION CENTER AS SOON AS A PROBLEM EXISTS. THE WARRANTY REPAIRS SHOULD BE COMPLETED IN A REASONABLE AMOUNT OF TIME, NOT TO EXCEED **30 DAYS**.

IF YOU HAVE ANY QUESTIONS REGARDING YOUR WARRANTY RIGHTS AND RESPONSIBILITIES, YOU SHOULD CONTACT KOMATSU ZENOAH AMERICA INC. AT (770)-381-5147.

**RedMax RECIPROCATOR
MODEL SGC2300DL
2-YEAR LIMITED WARRANTY**

EMISSION-RELATED PARTS, FOR TWO (2) YEARS FROM THE DATE OF ORIGINAL DELIVERY OF THE MODEL SGC2300DL UNIT, KOMATSU ZENOAH AMERICA INC. (THE COMPANY), THROUGH ANY RedMax DEALER, WILL REPAIR OR REPLACE, FREE OF CHARGE, FOR THE ORIGINAL AND EACH SUBSEQUENT PURCHASER, ANY PART OR PARTS FOUND TO BE DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP. EMISSION-RELATED PARTS ARE:

**THE CARBURETOR ASSY, COIL ASSY, ROTOR, SPARK PLUG,
AIR FILTER, FUEL FILTER, INTAKE MANIFOLD, AND THE GASKETS**

ALL OTHER PARTS EXCEPT ABOVE PARTS, FOR TWO (2) YEARS OF HOME USE [ONE (1) YEAR FOR ANY OTHER USE] FROM THE DATE OF ORIGINAL ANY DELIVERY OF THE MODEL SGC2300DL UNIT, THE COMPANY, THROUGH ANY RedMax DEALER, WILL REPAIR OR REPLACE, FREE OF CHARGE, FOR THE ORIGINAL PUSHCHASER, ANY PART OR PARTS FOUND TO BE DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP. **THIS IS THE EXCLUSIVE REMEDY.**

THE PURCHASER SHALL BEAR COSTS OF TRANSPORTING THE UNIT TO AND FROM THE RedMax DEALER.

THE PURCHASER SHALL NOT BE CHARGED FOR DIAGNOSTIC LABOR WHICH LEADS TO THE DETERMINATION THAT A WARRANTED PART IS DEFECTIVE, IF THE DIAGNOSTIC WORK IS PERFORMED AT THE RedMax DEALER.

THE PURCHASER OR OWNER IS RESPONSIBLE FOR THE PERFORMANCE OF THE REQUIRED MAINTENANCE AS DEFINED BY THE MANUFACTURER IN THE OWNER/OPERATOR MANUAL.

ANY WARRANTED PART WHICH IS NOT SCHEDULED FOR REPLACEMENT AS REQUIRED MAINTENANCE, OR WHICH IS SCHEDULED ONLY FOR REGULAR INSPECTION TO THE EFFECT OF "REPAIR OR REPLACE AS NECESSARY" SHALL BE WARRANTED FOR THE WARRANTY PERIOD. ANY WARRANTED PART WHICH IS SCHEDULED FOR REPLACEMENT AS REQUIRED MAINTENANCE SHALL BE WARRANTED FOR THE PERIOD OF TIME UP TO THE FIRST SCHEDULED REPLACEMENT POINT FOR THAT PART.

ANY REPLACEMENT PART THAT IS EQUIVALENT IN PERFORMANCE AND DURABILITY MAY BE USED IN NON-WARRANTY MAINTENANCE OR REPAIRS, AND SHALL NOT REDUCE THE WARRANTY OBLIGATION OF THE COMPANY.

THE COMPANY IS LIABLE FOR DAMAGES TO OTHER ENGINE COMPONENTS CAUSED BY THE FAILURE OF A WARRANTED PARTS STILL UNDER WARRANTY.

THIS WARRANTY DOES NOT APPLY TO THOSE UNITS WHICH HAVE BEEN DAMAGED BY NEGLIGENCE OF INSTRUCTION LISTED IN THE OWNER/OPERATOR MANUAL FOR PROPER USE AND MAINTENANCE OF THE UNITS, ACCIDENT MISHANDLING, ALTERATION, ABUSE, IMPROPER LUBRICATION, USE OF ANY PARTS OR ACCESSORIES OTHER THAN THOSE SPECIFIED BY THE COMPANY, OR OTHER CAUSES BEYOND THE COMPANY'S CONTROL.

THIS WARRANTY DOES NOT COVER THOSE PARTS REPLACED BY NORMAL WEAR OR HARMLESS CHANGES IN THEIR APPEARANCE.

THERE ARE NO OTHER EXPRESS WARRANTIES.

IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE **ARE LIMITED TO TWO (2) YEARS OF HOME USE [ONE (1) YEAR FOR ANY OTHER USE] FROM THE ORIGINAL DELIVERY DATE.**

LIABILITIES FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE UNDER ANY AND ALL WARRANTIES ARE EXCLUDED.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

IF YOU NEED TO OBTAIN INFORMATION ABOUT THE NEAREST SERVICE CENTER, PLEASE CALL KOMATSU ZENOAH AMERICA INC. AT (770)-381-5147.

IMPORTANT: YOU WILL RECEIVE A WARRANTY REGISTRATION CARD AT TIME OF PURCHASE. PLEASE FILL OUT THE CARD AND SEND IT TO RedMax / KOMATSU ZENOAH AMERICA WITHIN SEVEN (7) DAYS. BE SURE TO KEEP A COPY FOR YOUR RECORDS.



RedMax[®]

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